to the cyclonic storms, which is one of the major natural disasters, affecting the east coast of India. Keeping in view the vulnerability of the state, a Cyclone Warning Centre (CWC) was established in Bhubaneswar in 1973 to cater to the needs of Orissa coast, which forms part of time-tested organization for monitoring and forecasting of Tropical Cyclones. For speedy communication of warning messages, about 35 satellite-based Cyclone Warning Dissemination Systems (CWDS) have been installed along Orissa coast through which warning can be directly sent to the people in the affected areas, in local language.

(b) Yes, Sir. Government of India is in the process of setting up an Early Warning system for Tsunamis and Storm Surges in the Indian Ocean. The Department of Ocean Development (DOD), Department of Science and Technology (DST)/lndia Meteorological Department (IMD), Department of Space (DoS) and CSIR Laboratories are the major agencies involved in this endeavour. DOD is the lead agency.

(c) and (d) As part of the Early Warning system for Tsunamis and Storm surges, a centre would be set up at Indian Natural Centre for Ocean Information Services (INCOIS), Hyderabad on a 24x7 basis. The decision to locate the Tsunami Warning Centre at INCOIS, Hyderabad was taken as INCOIS is being developed as an Ocean Services Centre with a view to make optimal utilization of the in-house facilities created at INCOIS including Satellite Oceanography/Satellite Communication. INCOIS is the agency of the Department of Ocean Development and is already providing advisories on Potential Fishing Zone and ocean state parameters.

(e) The system is scheduled to be operational by September, 2007.

Upgradation of Seismology Department

995. SHRI N.R.GOVINDARAJAR: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether Government have any plan to upgrade Seismology Department with the latest state of the art electronic equipments to improve its earthquake monitoring network and detect tremors of smaller magnitude;

(b) whether it is a fact that Delhi falls under high seismic category (high risk category); and

(c) if so, the details thereof and the action taken by Government?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) India Meteorological Department (IMD), the nodal agency for operating and maintaining national seismological network, has plans to strengthen the seismological network to improve the detection of earthquakes of magnitude down to 3, on the Richter Scale occurring anywhere in the country by upgradation and setting up of more seismological observatories at selected locations in the country.

(b) and (c) According to seismic zoning map of India, prepared by Bureau of Indian Standards, the country has been divided into four seismic zones, *viz.,* Zone-V-ll. Zone-V is considered to be the most seismically active, while zone-ll is the least. Delhi falls in seismic zone-IV, which can experience earthquakes of intensity VIII on modified Mercally. In order to keep a watch on seismic activity in and around Delhi, a 16-element VSAT bases digital telemetry system has been commissioned which is being operated and maintained by IMD. Also, first level microzonation map at 1:50,000 scale has been prepared to help in better preparendness and formulating mitigation strategies.

Microzonation of buildings

†996. SHRI P.K. MAHESHWARI: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) by when the microzonation (to divide in small zones) work of easily destructible buildings due to earthquake would be completed in the national capital;

(b) if already completed the details thereof; and

(c) by when the same is likely to be completed in other parts of the country?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) and (b) First level seismic microzonation of National Capital Territory (NCT) of Delhi, at 1:50,000 scale, has been completed and further studies to prepare the microzonation map at larger scale, namely, 1:10,000 have been initiated. As per the first level seismic microzonation, NCT of Delhi has been divided into 9 units of likely uniform seismic hazard and ground response pattern.

†Original notice of question was received in Hindi